



SEQUENCE LISTING

<110> Sasaki, Yukiko
Nagano, Yukio
Inaba, Takehito

<120> Light Repressible Promoter

<130> 46216

<140> US 09/700,187

<141> 2000-11-13

<150> PCT/JP00/01269

<151> 2000-3-03

<160> 40

<170> PatentIn ver. 2.0

<210> 1

<211> 12

<212> DNA

<213> Pisum sativum cv. Alaska

<220>

<223> Nucleotide sequence for a core region of light repressible
promoter from the pea small GTPase gene

<400> 1
ggattttaca gt

12

<210> 2

<211> 93

<212> DNA

<213> Pisum sativum cv. Alaska

<220>

<223> Nucleotide sequence for a cis element of light repressible
promoter from the pea small GTPase gene

<400> 2
aaaagtaaca catattttga taaattttatt actaaaacta ttttctagta cttgttaatc 60
atgtctgagg attttacagt aataaagaaa cga 93

<210> 3

<211> 2325

<212> DNA

<213> pisum sativum cv. Alaska

<220>

<223> Nucleotide sequence for a light repressible promoter from the
pea small GTPase gene

<400> 3

```
aagcttttaa ggcaagggaa agacaacaat tccaaaaata taaaaactcc taaagaatga 60
ttttattctt atcttcataa ataacttttc ctattccaaa aacacatcaa agttatgtga 120
ttcatatctt taattatctg ataatatata attgtatatt caatatttca tacaattgtg 180
ttatatgaaa tattttgtag gtaaaaggga ctaagaataa cctccgcaac atcaaagtca 240
gaaacctctt gtaactcttc agttgaaacg agaaggaagt ggacaacaca gaaaactaag 300
ttccccact taacttcttg gtttggtgga ggacttcctt tacaatttat actctaagga 360
aatacattag acactctaga tgggttgcac tagtcatat atttttaagt aataataccc 420
acttcaagtt ttttgTTTTT tgttgTTgtg cagttagatga taagatggat catttctcaa 480
ggcccttatg caaagacata agatccatat actccaccaa gattgcttta catctaacca 540
agttaatgaa tttaaattct tcgaaacaat tatttcttac caaaggaagt ttatatgcac 600
attttctaag gtatttttat atagaattga tacatgtttc tgttatacaa gattagaatt 660
tggtattctc atccaaactc ctacacttgg tgagaaattt cagcctcaac ctcaagtaaat 720
caggttcctc cttcaaactc atacacttgg ttgagtggaga attatggacg tcaacctagc 780
aatatgaatc cctctccaag atcctacact tatctgagtg agaatttttg tcctcgacct 840
caacaagata gatttgatgg gtcatacaga ggggaagcat tcacattggg tcaaagattc 900
acccaaacaa gtgagagaga catcacatat caaccaaacc ctttaaggtga taggtgtatg 960
agttctctta cttataaagt gctcaacctc cacttttcta agcaatgtgt gacttagaac 1020
tcacacttat ttctcaacat aactcacact tgtttatcaa caatctcccc cacaagtgtg 1080
agttcattcg ctatgtcccc ctcaagtgga atctctttca tccgcatgct tataccgttg 1140
ttgacataca tctttactcg tcatgggcac ttcaatggga cagctgcct gaccaccatg 1200
tcaagaagac ttttgacaca aggagtcggg ccttactcg aaccagactc tgataccatt 1260
aatagatcac tttgaatgga tatcattcat actatatcaa acatttacgt aaagataaaa 1320
aattcaccca acaaatgag agagacacta catctctctt attatattaa taaaatgtaa 1380
agaaaaatat agtataaaag taacacatat tttgataaat ttattactaa aactattttc 1440
tagtacttgt taatcatgtc tgaggatttt acagtaataa agaaacgagg tagcccaaac 1500
aaaagtgata attgtggagg gtgtgatctt tgcggtgca aaaaatgaaa ccccaaactt 1560
gtgatattgt gtcgactgct ccgtcgctac attgaaatta atgaatgttc ttttataacg 1620
tttgtctatg ccgtattacc catatgggtc ctagaatggg acaatgaatt taatatatat 1680
ctgtcatgtg tgggtggatt caatttaatt gtatcgtaaa tggtaggaca tactcatgct 1740
acacaattat atcatcactg gtcaatcact ggtcaatgtg ttttctcttc ccatgaattc 1800
acattgctaa agaaaattac caccttaaaa tgtttatccc ttgcacacat ttcacatcaa 1860
tttattaaaa cattttacca ttggaaaaca catacatatt caatcaatta tttttgcatt 1920
ttcaaaaact aaaccaaaca aacttagaat attttgtaat tatagcacia ttttcaaaaa 1980
tatcctagtc ttcaaccact caataattca caatttccaa atcccttgca aaacatcaca 2040
acctctagaa actttgatta ataattctaataaaaagcaata atatgatatc taaacaatat 2100
caccatatat gttatgatat aatatgatgc agcaatacac ttaatttggt aaagcattaa 2160
agcgagacaa ctctattaac accggttaatt caacaaccgt tgttgctcag ttcattgttt 2220
cttccaactc ttttctttt cctttacttt atttatttct cctacttacc ttttctacta 2280
atatatacta tctctcttga acctcttttt gatcttgaca agaaa 2325
```

<210> 4

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used in Example 1

<400> 4

acggttggtg aattaccggt gttaatagag	30
<210> 5	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> NcoI primer used in Example 3	
<400> 5	
ggtccatggt cttgtcaaga tc	22
<210> 6	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer used for preparing PL1 in Example 3	
<400> 6	
gggaagcttt aaaggcaagg g	21
<210> 7	
<211> 23	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer used for preparing PL3 in Example 3	
<400> 7	
acgtaaagct taaaaattca ccc	23
<210> 8	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer used for preparing PL4 in Example 3	
<400> 8	
aaataaagct taaaagtaac acata	25

<210> 9

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL4B in Example 3

<400> 9

gtactgcagt cagacatgat taacaag

27

<210> 10

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL5 in Example 3

<400> 10

aaagaagctt gtagcccaa acaa

24

<210> 11

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing LS1 in Example 3

<400> 11

aagcttctgc agggatttta cagtaataaa

30

<210> 12

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing LS2 in Example 3

<400> 12

aagcttgctc gactgcagta cagtaataaa gaaac

<210> 13

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing LS3 in Example 3

<400> 13

aagcttgtct gaggatttct gcagaataaa gaaacgaggt ag

42

<210> 14

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing LS4 in Example 3

<400> 14

aagcttgtct gaggatttta cagtctgcag gaaacgaggt agcccaaa

48

<210> 15

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing LS5 in Example 3

<400> 15

aagcttgtct gaggatttta cagtaataaa ctgcagaggt agcccaaaca ag

52

<210> 16

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL2 in Example 3

<400> 16

tcaatgggac acgctgcctg accaccatgt

30

<210> 17

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> pUC19 primer used in Example 3

<400> 17

ggcgtaatca tggcatagc tgtttcctgt g

31

<210> 18

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL6 in Example 3

<400> 18

tgtcgggtgca aaaaatgaaa ccccaaactt

30

<210> 19

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL7 in Example 3

<400> 19

aatgtttatc ccttgacac atttcacatc

30

<210> 20

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL8 in Example 3

<400> 20

gcaaaacatc acaacctcta gaaac

25

<210> 21

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL4c in Example 3

<400> 21

gtttggctgc agtcgtttct ttattactgt aaaatcctc

39

<210> 22

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing PL4C in Example 3

<400> 22

caatactgca gtatatgtta tgatataata tgatgcagc

39

<210> 23

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> gF primer used for preparing gF1 in Example 3

<400> 23

tactgcagaa aagtaacaca tatTT

25

<210> 24

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing gF1 in Example 3

<400> 24

tggtgatatt gtttagatat catattattg c

31

<210> 25

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing GF2 in Example 3

<400> 25
atgatatcca agggatttgg aaat 24

<210> 26

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing GF3 in Example 3

<400> 26
gtgatatcgg gataaacatt ttaagg 26

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing GF4 in Example 3

<400> 27
ttgatatccc gacaaagatc acac 24

<210> 28

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer used for preparing gF5 in Example 3

<400> 28
gggatatctc gtttctttat tact 24

<210> 29

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA WT1 used in Example 8

<400> 29

gtctgaggat ttacagtaa taaagaaacg a

31

<210> 30

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA WT2 used in Example 8

<400> 30

tcgtttcttt attactgtaa aatcctcaga c

31

<210> 31

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA MT1 used in Example 8

<400> 31

gtctgaggct tttcccgtaa taaagaaacg a

31

<210> 32

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA MT2 used in Example 8

<400> 32

tcgtttcttt attacgggaa aagcctcaga c

31

<210> 33

<211> 55

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 35S46UP used in Example 9

<400> 33

aagcttggat ccctcgagct gcaggatata gcaagaccct tcctctatat aagga 55

<210> 34

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer KZ35SDW used in Example 9

<400> 34

ttccatggaa agctgcctag gagatcctct 30

<210> 35

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Origonucleotide WT3 used in Example 9

<400> 35

tgaggatttt acagtaattg aggattttac agtaattgag gattttacag taat 54

<210> 36

<211> 53

<212> DNA

<213> Artificial Sequence

<220>

<223> Origonucleotide WT4 used in Example 9

<400> 36

attactgtaa aatcctcaat tactgtaaaa tcctcaatta ctgtaaaatc tca 53

<210> 37

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 18X9RMDW used in Example 9

<400> 37

gcgatatacct ggatacctgag gatttt

26

<210> 38

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer 18X9RMUP used in Example 9

<400> 38

agcggccgcc agtgtggata tcattactgt

30

<210> 39

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer MT3 used in Example 9

<400> 39

tgaggctttt cccgtaattg aggcttttcc cgtaattgag gcttttcccg taat

54

<210> 40

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer MT4 used in Example 9

<400> 40

attacgggaa aagcctcaat tacgggaaaa gcctcaatta cgggaaaagc ctca

54